TRANSMISSION SURVEILLANCE SYSTEM (TSS)

COMPUTER AND PERIPHERALS (DISK SYSTEM)

DATA BASE MANAGEMENT

L5/L5E CARRIER

1. GENERAL

1.01 This data base management section describes the TSS data base files and the methods, procedures, and computer programs used to perform the following operations:

- Create or update the TSS data base

- Convert ASCII data to binary format usable by the TSS application programs.

1.02 This section has been reissued to reflect L5E and to update the existing TSS data.

1.03 The TSS data base is a compilation of data on every L5/L5E facility that can be accessed and tested by the L5/L5E Transmission Surveillance System. The L4 facility information can also be contained in the TSS data base where L5/L5E and L4 are in the same cable on conversion routes. Information required for the TSS data base must be obtained from engineering line drawings and local records.

1.04 An understanding of the general operation of a TSS is a prerequisite to the use of this section and is covered in Section 359-300-310. Included in that section are the following information and procedures:

- TSC equipment description and operation

- Software description

- Basic system operation

- System command structure

- File manager command structure

- Interactive editor description and use.

2. DATA BASE MAINTENANCE

A. General

2.01 The TSS data base is stored on a Hewlett-Packard HP 7900A or equivalent disk. The data is stored in ASCII and binary format. The data stored in ASCII format can be readily understood by an operator. It can also be edited using the HP interactive editor (EDITR) program. The edited file is used as an input to initialize and/or modify the binary data base on disk. The data stored in binary format is used by the TSS application programs (described in Section 359-300-312) to perform their designated functions. The binary files are created from the ASCII files using the DBGEN program. This process is described in paragraphs 2.06 through 2.09.

2.02 There are five separate ASCII files initially supplied in the TSS data base. The files are designated as FLOASC, GFPASC, MUXASC, L4PASC, and TIMTBL. A more detailed description of the individual files is provided in Part 3 of this section. If, for any reason, it is necessary to have more than one version of a particular ASCII data base file, the files may be saved with names that differ only after the first three characters. The first three characters should always be FLO, GFT, MUX, or L4P; the last three characters should always be alphanumeric.

B. Creating or Modifying the Data Base

2.03 All entries to the TSS data base must be made in a definite format. Each data base file must be maintained by the TSC operator with meaningful data for a specific TSS.

Data Base Initialization

2.04 After the initial system disk transfer (refer to Section 359-300-310) of the Western Electric supplied disk has been performed, the data base must then be initialized to describe the particular TSS.

Data Base Update

2.05 Whenever changes are made to the L carrier cable configuration, the TSS data base files (FLOASC, GFPASC, MUXASC,, L4PASC, and TIMTBL) must be updated using the EDITR program. The operation and use of the EDITR program and its associated commands are provided in Section 359-300-310.

C. Data Base Generation

2.06 After any modification, the updated ASCII file (or files) must be converted to binary format for use by the TSS application programs. This is accomplished by running the DBGEN program.

2.07 When the DBGEN proram is run, the following message exchange occurs:

Operator command:

*RU,DBGEN

System:

ENTER ASCII FILE NAME:

Operator response:

The name of the ASCII data base is then entered according to the binary data base to be generated. The identity of the binary data base is determined by the first three letters of the name of the ASCII data base. Any binary data base that was previously generated will be overwritten when a new binary data base is generated. Thus, there can be several ASCII data bases of the same type in different files with different names, but there can only be one binary data base in the system at any one time.

System:

The following typical messages are printed, depending upon the ASCII data base being converted. An error message will be printed if there is an error detected in the format of the file or DBGEN cannot gain access to the file (refer to paragraph 2.08).

GFPASC

GFP D. B. GEN. IN PROGRESS 10:48 2/22/77

GFP D. B. GEN. COMPLETED

ENTER ASCII FILE NAME:

FLOASC

FLO D. B. GEN. IN PROGRESS 10:50 2/22/77

FLO D. B. GEN. COMPLETED

ENTER ASCII FILE NAME:

MUXASC

MUX D. B. GEN. IN PROGRESS 10:51 2/22/77

MUX D. B. GEN. COMPLETED

ENTER ASCII FILE NAME:

TIMTBL

PGM. SCHEDULE GEN. IN PROGRESS 10:52 2/22/77

ENTER ASCII FILE NAME:

L4PASC

L4P D.B. GEN. IN PROGRESS 10:53 2/22/77

L4P D. B. GEN COMPLETED

ENTER ASCII FILE NAME:

Operator response:

The name of the ASCII data base is entered according to the next binary data base to be generated. If no more data bases are to be generated, a /E is entered to terminate the program.

2.08 When generating from the FLOASC data base file, the error message: **ERROR IN** *FLOASC DATA BASE LINE* xxx can occur. This message indicates a format error or line error in the file in line number *xxx*. When converting the GFPASC or L4PASC data base file, the error message: **DUPLICATE ENTRY IN GFPASC/L4PASC FILE LINE** *xxx* can occur. This message indicates two entries for the same E2 station are entered on Line *xxx* and on a previous line. If either of the two error messages listed above are printed, the operator should investigate the file for errors, edit the file if necessary, and try to generate it again.

In addition to the above two error messages, any of the file manager (FMGR) error messages **(FMGR ERROR** xxx) can occur. A list of the more commonly FMGR error *xxx* codes and their meaning is included in Table A. For a more detailed list of codes, refer to Section 359-300-310.

D. Data Base Backup and Restoral

2.09 A backup of the TSC data base is copied on the removable disk containing the system backup. A system backup should be made each time the data base is updated. The disk containing the backup should be properly labeled and stored. Making a system backup and restoring the system to normal using the backup disk is described in Section 359-300-310.

3. DATA BASE FILES

A. General

3.01 Except for TIMTBL, the ASCII files in the TSS data base are divided into two sections. The first section contains common data, and the second section contains specific data such as that pertaining to a certain fault location section. The first section containing the common data should never be modified except under direction of AT&T or BTL.

3.02 The five data base files are preformatted on the disk supplied with the TSC software. Each of the data base files must be edited so that it describes the TSS in which the TSC is located. Use of the EDITR program is described in Section 359-300-310.

3.03 A listing of the preformatted or previously initialized data base file may be obtained prior to starting an edit. The operator should mark the data base file with data pertinent to the TSS. This copy can then be used as an aid during the edit process. The time required to obtain a copy of each of the data base files is as follows:

FILE	TIME
FLOASC	60 minutes
GFPASC	15 minutes
MUXASC	25 minutes
L4PASC	15 minutes
TIMTBL	—

B. Fault Location Oscillator Data Base File

3.04 The FLOASC data base file is comprised of data which enables the TSC to control automatic fault location on its L5/LSE routes. It includes data on limits, nominal levels, oscillator control information, and manhole numbers. The FLOASC file, when initialized and converted into binary format, is used by the application program FAULT (refer to Section 359-300-312) and other programs. A printout of Page 1 of the preformatted file supplied by Western Electric is shown in Fig. 1. The entire FLOASC file must always contain 530 lines.

3.05 Figure 2 is an edited version of a typical FLOASC data base file. This particular file describes part of the L5/L5E line section shown in Fig. 3. The column-by-column information contained in this file is described in Table B.

3.06 A drawing such as the one shown in Fig. 3 should be sketched prior to building a FLOASC or GFPASC data base. This sketch should be retained in office records and be available at the TSC for reference when running programs and interpreting printouts. For the FLOASC file, the drawing should include the following:

(a) Titles and legend.

(b) A symbol for each station, indicating the station type (TSC, switching power feed, etc). Associated with each symbol is the station name, its E2 address, and the route numbers (SAN route switch ports used to access the RLT ports) for each incoming line.

(c) A connecting line between the station symbols for each part of the line. Associated with each part of the line is the 4-digit nationwide line code. Numbers are also used to indicate the lines equipped and the manholes that are included in each FLO control section.

3.07 The sections of the second part of the FLOASC data base file (lines 0020 through 0530) should be generated in logical order. Whenever possible, start with the section at the east (or at the north) end of the route and proceed to the west or to the south. The sections should be grouped together with no interspersed unused parts in the data base file.

3.08 It should be noted that there has to be a separate section in the FLOSAC data base for every route connecting to every office. In some cases there will be no repeaters listed in a particular section of the FLOASC data base since all repeaters are controlled by the office at the other end of that part of the line; nevertheless, the section data must be present. Among other reasons, this ensures that the functions that are present at every station are defined in the data base.

3.09 In addition to the data contained in Fig. 3, it is necessary to know which lines are standby lines. Occasionally, other information is needed (eg, whether Woodbine or Pottstown controls the part of line between these two stations).

C. Gain/Frequency/Pilot Data Base File

3.10 The GFPASC data base file is comprised of data which enables the TSC to control line gain/frequency runs on the L5/L5E line and to make line and multiplex pilot readings at various test points in the L5/L5E stations. It includes data on limits and nominal levels of the pilots, E2 addresses, lines equipped, switch access route information, whether or not the individual sections are switched, and if a multiplex section is involved. In addition, it contains information indicating what type of system (17 or 18 mastergroup L5, or 20 or 22 mastergroup L5E) is present on each equippped line. The GFPASC file, when initialized and converted into binary format, is used by the application programs PILOT, RESTO, and LINES (refer to Section 359-300-312). A printout of Page 1 of the preformatted file supplied by Western Electric is shown in Fig. 4. The entire GFPASC file must always contain 62 lines.

3.11 Figure 5 is an edited version of Page 1 of a typical GFPASC data base file. This particular file describes the TSS layout shown in Fig. 3. The information contained in this particular file is described in Table C.

3.12 The sketch shown in Fig. 3 that was prepared for FLOASC data base generation can also be used when generating the GFPASC data base file. In addition to information contained in Fig. 3, it is also necessary to know where multiplex equipment is present at each of the stations along the line.

3.13 The sections of the second part of the data base file (lines 0022 through 0062) should be generated in logical order as discussed in paragraph 3.14. The sections should be entered with no interspersed unused parts in the data base file.

3.14 A list of allowable combinations of transmitting (TRMT) and receiving (RCVG) E2 addresses and switch access route numbers is developed. Starting at the switching station nearest to the east (or north) end of the TSS route, pair its E2 TRMT address with the E2 RCVG address of all the allowable receiving stations, including the following:

    (a) The next switching-type station on either side of TRMT

    (b) Each power feed station in each direction between the TRMT station and the next switching-type station

    (c) If the TRMT station is equipped with JMX or MMGT equipment (regardless of the number of stations involved), (a) and (b) must be repeated for each switching station in the route, working from east to west (or north to south).

3.15 By following the above rules, the list will not include any sections which have JMX or MMGT equipment at a midstation. The JG or MMG dropping and frogging arrangements make it impractical to measure pilots through such an office. Note also that a portion of a line between a switching station and a power feed station is only included in one direction of transmission. This is because the LINES program can only be initiated from switching stations.

D. Multiplex Data Base File

3.16 The MUXASC data base file is comprised of data which enables the TSC to control measurements of jumbogroup multiplex (JMX) and/or multimastergroup translator (MMGT) pilots at stations along the L5/L5E line. It includes data on limits and nominal levels on JMX and MMGT pilots and access information for each multiplex section. The MUXASC file, when initialized and converted into binary format, is used by the application program MUXPG (refer to Section 359-300-312). A printout of Page 1 of the preformatted file supplied by Western Electric is shown in Fig. 6. The entire MUXASC file contains 446 lines.

3.17 Figure 7 is an edited version of Page 1 of a typical MUXASC data base file. This particular file describes the TSS layout shown in Fig. 3. The information contained in this file is described in Table D.

3.18 Before building a MUXASC data base, it is desirable to complete a work sheet such as the one shown in Fig. 8. A partially completed work sheet is shown in Fig. 9. This work sheet should be retained in office records and updated as the system grows. The data from this work sheet should be entered with no interspersed unused parts in the data base file.

3.19 There should be an entry on the work sheet for each JG or MMG connection between any two stations in the TSS. Each entry in this table will be used to formulate two entries in the MUXASC data base file, one for each direction of transmission (station A to station B and station B to station A). Both entries will have the same number for MXCODE, but will only contain entries for one each of the section. The headers for the different columns in Fig. 8 are the same as the header used in the MUXASC data base file. These headers are described in Table D.

E. L4 Pilot Data Base File

3.20 The L4PASC data base file is comprised of data which enables the TSC to control L4 line pilot readings. These reading are made on conversion routes at various test points in the L5/L5E stations. It includes data on limits and nominal levels of the pilots, E2 addresses, lines equipped, switch access route information, the number of switching sections between the stations, and also whether or not there is a TSS-CTMS hybrid present in the L4 calibration path. The L4PASC file, when initialized and converted into binary format, is used by the application program L4PIL (refer to Section 359-300-312). A printout of the performatted file supplied by Western Electric is shown in Fig. 10.

3.21 Figure 11 is an edited version of a typical L4PASC data base file. This particular file

describes the L4 line shown in Fig. 12. The information contained in this file is described in Table E.

3.22 A drawing such as the one shown in Fig. 12 should be sketched prior to building an L4PASC data base. The sketch is basically similar to the one that is shown in Fig. 3 for an L5/L5E line. Whenever possible, start at the east (or at the north) end of the TSS and pair its E2 TRMT address with the E2 RCVG address of all receiving stations described as follows:

  (a) The nearest switching-type station in each direction

  (b) Any large part of the route between switching stations that is desired to be included in the L4PIL program printout.

This procedure must be repeated for each station in the system. The entries should be grouped so that there are no interspersed unused parts in the data base file.

F.   Timetable Data Base File

3.23 The TIMTBL data base file is comprised of scheduling information data which enables the TSC to automatically perform application programs (Section 359-300-312) at a certain time and interval. A printout of the preformatted file supplied by Western Electric is shown in Fig. 13. As shown in Fig. 13, the preformatted file contains two examples which can be followed to schedule the application programs FAULT and PILOT.

3.24 In Fig. 13, the asterisks (**) at the start of a line causes the TIMTBL program to ignore the line when searching for programs to schedule. An operator may add as many lines as he wishes starting with ** for comment purposes without affecting the scheduling process. Also, lines 0010, 0011, 0021, 0023, 0024, and 0035 are for information purposes only and do not have to be entered.

3.25 Editing the TIMTBL file to schedule programs requires additional line of data starting at line 36 (see Fig. 14). The first line contains the program name, the day or date the program is to run, the starting time, and a number of the list

device on which the output is to be printed. A specific day of the month (eg, 25 for the 25th day of each month) may be given for the day the program is to run. It may also be scheduled to run once each week by specifying the day of the week to run. Use at least the first two letters of the day (ie, MO for Monday, TU for Tuesday, etc). If it is to run everyday, enter EV or EVERYDAY instead. The output device is given as 1 for the system console, 6 for the line printer when available, 10 for the data set, and 30 for a remote console.

3.26 Succeeding lines of an individual schedule are response that would be given if the program were being run in the demand mode. Some of the most commonly used prompters are listed in Table F. For a full explanation of prompters and responses, see the input formation portions of Section 359-300-312 for application programs and Section 359-300-510 for diagnostic programs. A /**E** entry in TIMTBL is often required to answer a "continue" question so that the program will terminate after it has performed the requirements of the schedule. /**E** is also used to separate the different program schedules.

3.27 Figure 14 is a partially edited version of a typical TIMTBL data base file. The information in this file is described in Table G.

4.   REFERENCES

4.01 The following reference material supplements this section:

Schematic Drawings

DRAWING	TITLE
SD-51200-01	L5/L5E Carrier, Transmission Surveillance System, Application Schematic
SD-51203-01	L5/L5E Carrier, Transmission Surveillance System, Switched Access Network
SD-51204-01	L5/L5E Carrier, Transmission Surveillance System, Manual Fault Location Test Set

DRAWING	TITLE	SECTION	TITLE
SD-51205-01	L5/L5E Carrier, Transmission Surveillance System, Auxiliary Digital Control Unit Circuit	359-300-107	L5/L5E Carrier, Transmission Surveillance System (TSS), General Administrative Procedures
SD-51206-01	L5/L5E Carrier, Transmission Surveillance System, Power Enabler and Decoder Circuit	359-300-300	L5/L5E Carrier, Overall System, L5/E2 Alarm Analysis
SD-51207-01	L5/L5E Carrier, Transmission Surveillance System, Manual Control and Display System	359-300-301	L5/L5E Carrier, Overall System, L5E/E2 Alarm Analysis
SD-51208-01	L5/L5E Carrier, Transmission Surveillance System, Metering and Local Control Circuit	359-300-310	L5/L5E Carrier, Transmission Surveillance System, Computer and Peripherals (Disc System), General Operation
SD-51209-01	L5/L5E Carrier, Transmission Surveillance System, Power Distribution Circuit	359-300-312	L5/L5E Carrier, Transmission Surveillance System—Cable
SD-51210-01	L5/L5E Carrier, Transmission Surveillance System, Multiple Access Interface Circuit	359-300-510	L5/L5E Carrier, Transmission Surveillance System—Cable, Computer and Peripherals (Punched Paper Tape Dignostic)
SD-51212-01	L5/L5E Carrier, Transmission Surveillance System, Power Control Circuit for Fault Location Oscillators		

Task Oriented Practices (TOP)

SD-51213-01	L5/L5E Carrier, Transmission Surveillance System, Fault Location Oscillator Unit	SECTION	TITLE
SD-51230-01	L5/L5E Carrier, Jumbogroup Multiplex, Application Schematic	356-570-000	L Multiplex Terminals, Mastergroup Translator System (MGTA)
SD-6G092-01	Transmission Test Equipment, Carrier-Frequency Transmission Measuring Sets, 90-Type Equipment, 90F Digital Control Unit	356-570-001	L Multiplex Terminals, Mastergroup Translator System (MGTB)
		356-671-000	L Multiplex Terminals, TMX-1, Maintenance

Bell System Practices

		359-372-000	L5/L5E Carrier, Main Station Line Bays
SECTION	TITLE	359-375-000	L5/L5E Carrier, High-Frequency Line Transmission (Switching Section)
359-300-100	L5/L5E Carrier, Overall System, Description	357-377-000	L5/L5E Carrier, Transmission Surveillance Auxiliary
359-300-105	L5/L5E Carrier, Transmission Surveillance System—Cable	359-381-000	L5/L5E Carrier, Transmission Surveillance Center (Bay Equipment)

TABLE A

COMMON FILE MANAGER ERROR CODES

ERROR CODE	MEANING
—001	Disc error (down).
—002	Duplicate file name.
—003*	Backspace not legal (type-0 file).
—004*	File too long or record size error (type-0 file).
—005*	Attempt to read or position to a record not written, or (on update) to write an illegal length record.
—006	Cartridge not found, file not found, or no room.
—007	Invalid security code.
—008	File currently open. Eight programs (too many) have attempted access; exclusive open or lock rejected.
—009	Attempt to open type-0 file as type-1, or to use APOSN (position) on type-0 file.
—010*	Not enough parameters.
—011*	DCB (data control block) not open.
—012*	EOF (end-of-file) or SOF (start-of-file) error.
—013	Cartridge locked.
—014	Directory full.
—015	Illegal name.
—016	Illegal type, or size = 0 (on CR only).
—017	Illegal read or write attempted on type-0 file.

*These codes indicate a program or machine error.

```
0001  HEADING: STATION NAME, ETC. -----------------------------------------
0002           FAULT LOCATION OSCILLATOR ASCII DATA BASE
0003                    PR-50023-01-FLOASC ISSUE 3 3/30/78
0004  ALARM LEVELS:
0005  BA RPT GAIN  REG RPT GAIN  RMS DEV(%)  LINE LOSS  LOSS OF TONE
0006    1.5           5.5           .15        10.00       -75.0
0007
0008  TONE LEV PILOT SCL:   TEMP PILOT LEVELS:
0009   MINIMUM  MAXIMUM      RLT   TT    TLT
0010   -65.0    -40.0       -37.7 -75.7 -46.00
0011
0012  LEVELS:
0013  REC LF FLO OUT  FLO REC  REC HF FLO OUT  XMT CAL OUT  CAL REC
0014    -53.50         -55.0       -52.60         -25.0      -50.00
0015
0016  FAULT TONES(KHZ):
0017  LOW INPUT  LOW OUTPUT  HIGH INPUT  HIGH OUTPUT   PREDICTED DEV
0018   1590.0     1600.0      68600.00    68650.00        .5
0019  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
0020  LINES IN SERVICE(1 = IN SERVICE)                 FAULT SEC:  B
0021  502 504 506 508 510 512 514 516 518 520 522 STBY  SEC# LN CODE N
0022   0   0   0   0   0   0   0   0   0   0   0  501    01   0000   0
0023  RECEIVE FLO    RECEIVE  FLO
0024  E2 ADDRS E2    ROUTE #S RTE   FCTS PRESENT(=1) @ FLO CONTROL STA
0025  ODD EVEN ADD   ODD EVEN #      1  2  3  4  5  6  7  8  9 10 11 12
0026   00  00  00     00  00  00     0  0  0  0  0  0  0  0  0  0  0  0
0027
0028  MANHOLES(CONTROLLED FROM FLO E2 ADDRESS):
0029   1ST  LAST  EXTRA OR (NEGATIVE "-")MISSING  - - - - - - - -
0030   9999 9999  9999 9999 9999 9999 9999 9999 9999 9999 9999 9999
0031
0032  MANHOLES:
0033   STA1 STA2 EQU   REGS - - - - - - - - - - - - - - - - - - -
0034   9999 9999 9999  9999 9999 9999 9999 9999 9999 9999 9999 9999
0035  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
0036  LINES IN SERVICE(1 = IN SERVICE)                 FAULT SEC:  B
0037  502 504 506 508 510 512 514 516 518 520 522 STBY  SEC# LN CODE N
0038   0   0   0   0   0   0   0   0   0   0   0  501    02   0000   0
0039  RECEIVE FLO    RECEIVE  FLO
0040  E2 ADDRS E2    ROUTE #S RTE   FCTS PRESENT(=1) @ FLO CONTROL STA
0041  ODD EVEN ADD   ODD EVEN #      1  2  3  4  5  6  7  8  9 10 11 12
0042   00  00  00     00  00  00     0  0  0  0  0  0  0  0  0  0  0  0
0043
0044  MANHOLES(CONTROLLED FROM FLO E2 ADDRESS):
0045   1ST  LAST  EXTRA OR (NEGATIVE "-")MISSING  - - - - - - - -
0046   9999 9999  9999 9999 9999 9999 9999 9999 9999 9999 9999 9999
0047
```

Fig. 1—Preformatted FLOASC Data Base File

```
JB      T=00003 IS ON CR00002 USING 00096 BLKS R=0000

0001  HEADING: DRANESVILLE,VA.
0002              FAULT LOCATION OSCILLATOR ASCII DATA BASE
0003                    PR-50023-01-FLOASC ISSUE 3  3/30/78
0004  ALARM LEVELS:
0005  BA RPT GAIN  REG RPT GAIN  RMS DEV(%)  LINE LOSS  LOSS OF TONE
0006     1.5           5.5           .15       10.00       -75.0
0007
0008  TONE LEV PILOT SCL:    TEMP PILOT LEVELS:
0009   MINIMUM  MAXIMUM       RLT   TT    TLT
0010    -65.0    -40.0      -37.7 -75.7 -46.00
0011
0012  LEVELS:
0013  REC LF FLO OUT  FLO REC   REC HF FLO OUT   XMT CAL OUT   CAL REC
0014     -53.50        -55.0       -52.60          -25.0       -50.00
0015
0016  FAULT TONES(KHZ):
0017  LOW INPUT   LOW OUTPUT   HIGH INPUT   HIGH OUTPUT    PREDICTED DEV
0018   1590.0      1600.0      68600.00     68650.00          .5
0019  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
0020  LINES IN SERVICE(1 = IN SERVICE)                    FAULT SEC:  B
0021  502 504 506 508 510 512 514 516 518 520 522 STBY  SEC# LN CODE N
0022   1   1   0   0   0   0   0   0   0   0   0  501    01  3667   0
0023  RECEIVE FLO   RECEIVE  FLO
0024  E2 ADDRS E2   ROUTE #S RTE   FCTS PRESENT(=1) @ FLO CONTROL STA
0025  ODD EVEN ADD  ODD EVEN #    1  2  3  4  5  6  7  8  9 10 11 12
0026   21  22  21    01  02  01   1  1  0  0  1  0  0  0  1  0  0  0

0028  MANHOLES(CONTROLLED FROM FLO E2 ADDRESS):
0029   1ST  LAST  EXTRA OR (NEGATIVE "-")MISSING  - - - - - - - -
0030   0000 0160  9999 9999 9999 9999 9999 9999 9999 9999 9999 9999
0031
0032  MANHOLES:
0033   STA1 STA2 EQU   REGS - - - - - - - - - - - - - - - - - -
0034   0000 0160 9999   0050 0100 9999 9999 9999 9999 9999 9999 9999
0035  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
0036  LINES IN SERVICE(1 = IN SERVICE)                    FAULT SEC:  B
0037  502 504 506 508 510 512 514 516 518 520 522 STBY  SEC# LN CODE N
0038   1   1   0   0   0   0   0   0   0   0   0  501    02  3687   1
0039  RECEIVE FLO   RECEIVE  FLO
0040  E2 ADDRS E2   ROUTE #S RTE   FCTS PRESENT(=1) @ FLO CONTROL STA
0041  ODD EVEN ADD  ODD EVEN #    1  2  3  4  5  6  7  8  9 10 11 12
0042   22  23  23    04  03  03   1  1  0  0  1  0  0  0  1  0  0  0
0043
0044  MANHOLES(CONTROLLED FROM FLO E2 ADDRESS):
0045   1ST  LAST  EXTRA OR (NEGATIVE "-")MISSING  - - - - - - - - -
0046   0000 0230  9999 9999 9999 9999 9999 9999 9999 9999 9999 9999
0047
```

Fig. 2—Typical FLOASC Data Base File
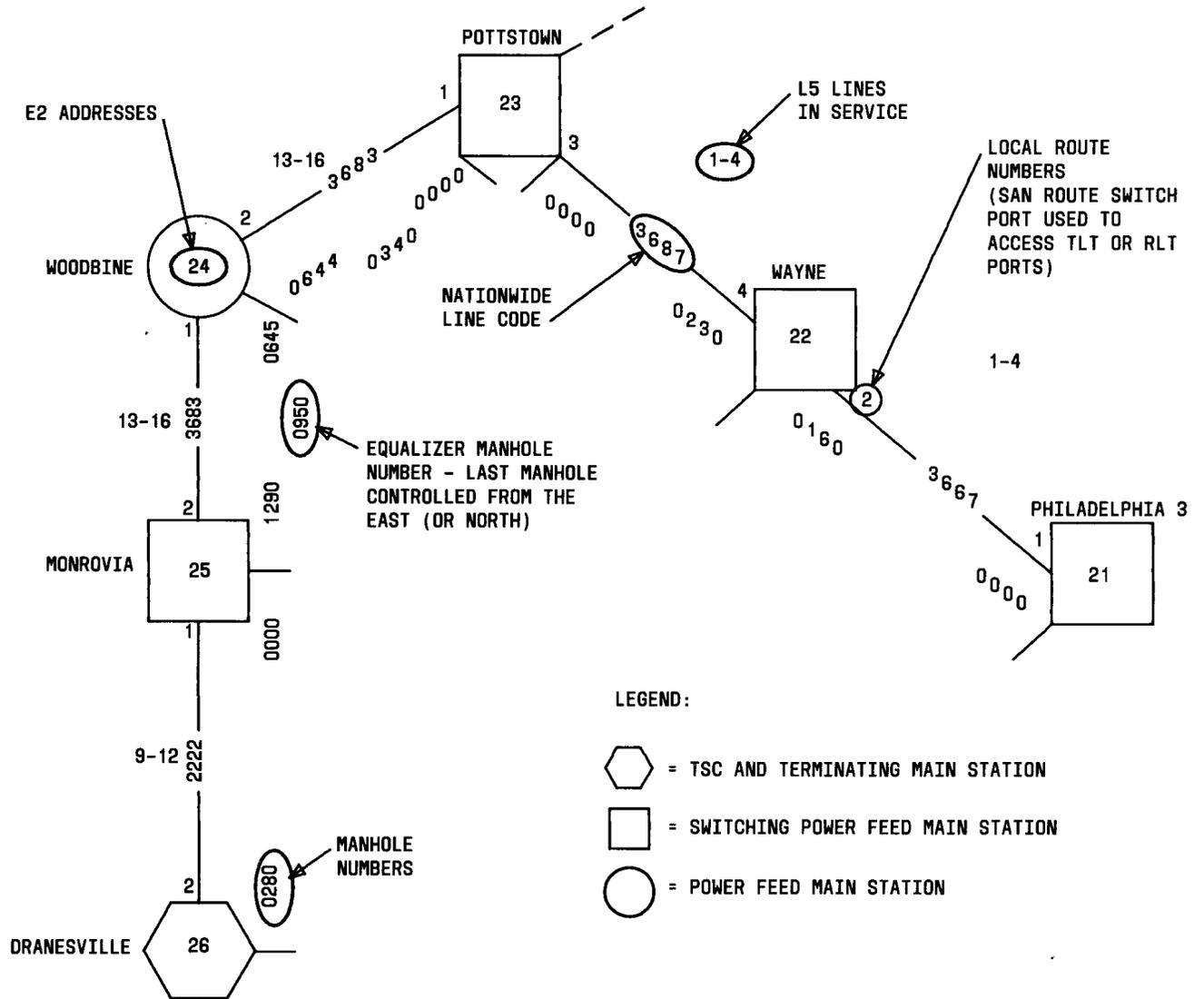
Fig. 3—Typical L5/L5E Line From Which L5/L5E Data Base Files in Fig. 2, 5, and 7 are Developed

TABLE B

FLOASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS	SOURCE
0001	Heading (TSC station name and date of last modification to file).	Locally Provided
0002 0003	Identifying information for the file — FAULT LOCATION OSCILLATOR ASCII DATA BASE PR-50023-01-FLOASC ISSUE 3 3/30/78	Preformatted Data Base File
0004	Header information—ALARM LEVELS:	
0005 0006	Header information and alarm levels are defined as follows: **Header and Level** **Meaning** BA RPT GAIN 1.5 — ± 1.5 dB is the gain deviation from the nominal value for basic repeaters which causes the FAULT PROGRAM to print an * flag. REG RPT GAIN 5.5 — ± 5.5 dB is the gain deviation from the nominal value for regulator repeaters which causes the FAULT program to print an * flag. RMS DEV (%) .15 — $\pm .15\%$ is the limit for the average RMS deviation for noisy measurements which causes the FAULT program to print a % flag. LINE LOSS 10.00 — 10 dB is the line loss limit which, when exceeded, causes the FAULT program to print a # flag. LOSS OF TONE —75.0 — —75 dB is the level limit which, when the tone is below, causes the FAULT program to assume that tone is missing and print a ? flag.	Preformatted Data Base File
0008 0009 0010	Header information and pilot levels (Note) are defined as follows: **Header and Level** **Meaning** TONE LEV PILOT SCL: MINIMUM MAXIMUM —65.0 —40.0 — Minimum and maximum tone level pilot scale: —65.0 dBm minimum value and —40.0 dBm maximum value for FLO tone amplitudes to be plotted by the FAULT program. TEMP PILOT LEVELS: RLT TT TLT —37.7 —75.7 —46.00 — Nominal temperature pilot tone levels at receiving line test point (RLT), transmitting test point (TT), and transmitting line test point (TLT), RLT = —37.7 dBm, TT = —75.7 dBm, and TLT = —46.00 dBm expected by the FAULT program.	
0012	Header information—LEVELS:	

Note: Limits for equalizing and station repeaters are not equal for positive and negative gain. The values are computed from the following formula:

1.75 + (14.5/11) × regulating repeater limit

TABLE B (Contd)

FLOASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS	SOURCE
0013 0014	Header information and FLO tone levels are defined as follows: Header and Level — REC LF FLO OUT −53.50 — Meaning: −53.50 dBm is the receiving station repeater low-frequency FLO output tone level expected by the fault program. FLO REC −55.0 — −55.0 dBm is the FLO receive level expected by the FAULT program. REC HF FLO OUT −52.60 — −52.60 dBm is the receiving station repeater high-frequency FLO output tone level expected by the FAULT program. XMT CAL OUT −25.0 — −25.0 dBm is the transmit calibration output level used in the FAULT program to set the signal level transmitted from the 90-type oscillator for reference measurements. CAL REC −50.00 — −50.00 dBm is the calibration signal receive level expected by the FAULT program. An error message is generated if the level differs by ±6 dB or more.	Preformatted Data Base File
0016	Header information—FAULT TONES (KHZ)	
0017 0018	Header information and FLO tones are defined as follows: Header and Tone — LOW INPUT 1590.0 — Meaning: Low input FLO frequency = 1590.0 kHz. LOW OUTPUT 1600.0 — Low output FLO frequency = 1600.0 kHz. HIGH INPUT 68,600.0 — High input FLO frequency = 68,600.00 kHz. HIGH OUTPUT 68,650.0 — High output FLO frequency = 68,650.00 kHz. PREDICTED DEV .5 — Allowable difference level change of regulating repeater between measurements = 0.5 dB.	
0020 0021	Header information— LINES IN SERVICE (1 = IN SERVICE) FAULT SEC: B 502 504 506 508 510 512 514 516 518 520 522 STBY SEC # IN CODE N	

TABLE B (Contd)

FLOASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS	SOURCE
0022	L5 lines in service, standby line pair (STBY), fault section number (SEC#), nationwide line code (LN CODE), and manhole number plan are identified in columns as follows: _Column_ · Meaning 1 thru 11 · · · Lines in service are indicated by entering a 1 under those lines equipped. For example, a 1 under columns 1 and 2 indicates that L5 lines 501, 502, 503 and 504 are in service for this particular section. A 0 under columns 3 thru 11 indicates that lines 505 thru 522 are not in service for this particular section. 12 · · · The odd number 501 indicates that line pair 501 and 502 is the standby line pair for this particular section. 13 · · · 01 is the sequence number for this particular section. It must never be modified. 14 · · · 3667 is the line code identification number for this particular section. 15 · · · A 0 under BN (abbreviation for backward numbered) indicates that both the lines and manholes for this particular section are numbered in the standard manner (manhole numbers assigned in ascending order—north to south or east to west and odd numbers assigned to lines transmitting north or east and even numbers assigned to lines transmitting south or west), or both are numbered in reverse order. A 1 under this column indicates that only the manholes are numbered in reverse order or that only the line numbers are assigned in the reverse order.	(See Fig. 2) Columns 1—12 and 15 information is obtained from local records; column 13 information is obtained from pre-formatted data base file; column 14 information is obtained from engineering line drawings.
0023 0024 0025	Header information— RECEIVE FLO · · · · · · · · · · RECEIVE FLO E2 ADDRS E2 · · · · · · · · · · ROUTE #S RTE ODD EVEN ADD · · · · · · · ODD EVEN # FCTS PRESENT(=1) @ FLO CONTROL STA 1 2 3 4 5 6 7 8 9 10 11 12	Preformatted Data Base File
0026	E2 addresses, local route numbers, and functions present information identified in columns as follows: _Column_ · Meaning 1 · · · 21 is the E2 address for the odd-numbered line at the receiving end of the particular power-feed section	Engineering Drawings

TABLE B (Contd)

FLOASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS	SOURCE
0026 Contd	<table><tr><td>Column</td><td>Meaning</td></tr><tr><td>2</td><td>22 is the E2 address for the even-numbered line at the receiving end of the particular power feed section</td></tr><tr><td>3</td><td>21 is the E2 address for the station having FLO control for the power feed section</td></tr><tr><td>4 and 5</td><td>01 and 02 are the local route numbers required for TSS hardware to access RLT points for odd- and even-numbered lines, respectively, at the receiving end of the power feed section. These route numbers may be from 1 to 10 with unique numbers for each cable entrance. Odd numbers must be used with RLT points on odd receiving lines and even numbers on even lines.</td></tr><tr><td>6</td><td>01 is the local route number required by the TSS hardware to control the FLO. This route number will be the same as that used to access the RLT point at this station.</td></tr><tr><td>7 thru 18</td><td>A 1 under columns 1, 2, 5, and 9 indicates that the RLT, TT, TLT, and RT point functions, respectively, are present. These are the only functions currently in use. The remaining columns are reserved for future functions.</td></tr></table>	Engineering Line Drawings Local records
0028 0029	Header information— MANHOLES (CONTROLLED FROM FLO E2 ADDRESS): 1ST LAST EXTRA OR (NEGATIVE "—") MISSING ------------	Preformatted Data Base File
0030	Manhole information for the station having FLO control is identified in columns as follows: <table><tr><td>Column</td><td>Meaning</td></tr><tr><td>1</td><td>0000 is the assigned manhole number for the station having FLO control.</td></tr><tr><td>2</td><td>0160 is the number identifying the last manhole controlled in the current FLO control section.</td></tr><tr><td>3 thru 12</td><td>9999 indicates that there are no missing or extra manholes in the control section. Any manhole number, other than the first or last, that does not end in zero, or any manhole number ending in zero that is not used (missing) is entered here. Missing manhole numbes are peceded by a minus sign.</td></tr></table>	Local records Engineering Line Drawings

TABLE B (Contd)

FLOASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS	SOURCE
0032 0033	Header information— MANHOLES: STA1 STA2 EQU REGS --	Preformatted Data Base File
0034	This line contains a listing of all repeaters that are not basic repeaters (station, equalizing, or regulating): <u>Column</u> <u>Meaning</u> 1 and 2 0000 is the assigned manhole number for the station having FLO control. 0160 is the assigned manhole number for the far-end station. In this special case, it is controlled as part of the current FLO control section. Usually, the far-end station repeater is not so controlled, and the number 9999 is left in this column. 3 9999 indicates that there are no equalizing repeaters in this section. 4 thru 12 0050 and 0100 in columns 4 and 5 are regulating repeater manhole numbers. 9999 in columns 6 thru 12 indicates an absence of any more regulating repeaters.	Local records Engineering Line Drawings
0036 thru 0050	Lines 0036 thru 0050, 0052 thru 0066, 0068 thru 0082, etc, are repetitions of lines 0020 thru 0034 for other FLO sections (Fig. 3)	Local records

```
0001    HEADING: -----------------------------------------------------------
0002            GAIN,  FREQUENCY AND PILOT ASCII DATA BASE
0003                        PR-50023-01-GFPASC   ISSUE 2 11/11/77
0004         FREQUENCY RANGE(KHZ):        XMTR SEND  FLAT GAIN
0005     LOW    HIGH   STEP   TYPE ACC    LEVEL DBM  ADJUST DB
0006     1000.  70000. 1000.  1.00  1        -25.0      -25.0
0007
0008          TLT LEVELS IN DBM AT:
0009     LP1    LP2     LP3    LP4    JG1    JG2    JG3    MMG1    MMG2   MMG3
0010    -49.5 -48.1 -46.54 -51.1 -59.0 -57.6 -56.3 -60.5   -59.1 -57.8
0011
0012    TLT DIFF. IN DB     LINE DEVIATION IN DB/# SW SECTS
0013    LN PILOT  OTHER     0    1    2    3    4    5    6
0014        .5      2.0    0.4  0.6  0.9  1.2  1.6  2.0  2.4
0015
0016    ALLOWABLE COMBINATIONS OF TRANS & REC E2 ADDRESSES &
0017    SWITCH ACCESS ROUTE #S. ENTER 1 IF LINES ARE ODD &
0018    0 IF EVEN. ENTER 1 FOR LINES PRESENT OR 0 IF NOT.
0019
0020    XM XM RC RC E 501 03 05 07 09 11 13 15 17 19 21 #SW MUX
0021    E2 RT E2 RT 0 502 04 06 08 10 12 14 16 18 20 22 SEC SEC
0022     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0023     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0024     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0025     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0026     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0027     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0028     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0029     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0030     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0031     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0032     0  0  0  0 0.  0  0  0  0  0  0  0  0  0  0  0   0   0
0033     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0034     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0035     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0036     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0037     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0038     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0039     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0040     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0041     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0042     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0043     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0044     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0045     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0046     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0047     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
```

Fig. 4—Preformatted GFPASC Data Base File

```
GFPASC T=00004 IS ON CR00002 USING 00013 BLKS R=0000

0001  HEADING:  DRANESVILLE,VA.
0002            GAIN, FREQUENCY AND PILOT ASCII DATA BASE
0003                        PR-50023-01-GFPASC  ISSUE 2  11/11/77
0004        FREQUENCY RANGE(KHZ):        XMTR SEND  FLAT GAIN
0005    LOW    HIGH   STEP   TYPE ACC   LEVEL DBM  ADJUST DB
0006   1000.  70000.  1000.  1.00  1     -25.0      -25.0
0007
0008        TLT LEVELS IN DBM AT:
0009   LP1     LP2     LP3    LP4    JG1    JG2    JG3    MMG1   MMG2   MMG3
0010  -49.5   -48.1  -46.54  -51.1  -59.0  -57.6  -56.3  -60.5  -59.1  -57.8
0011
0012   TLT DIFF  IN DB          LINE DEVIATION IN DB/#SW SECTS
0013   LN PILOT  OTHER      0    1    2    3    4    5    6
0014     .5       2.0      0.4  0.6  0.9  1.2  1.6  2.0  2.4
0015
0016  ALLOWABLE COMBINATIONS OF TRANS & REC E2 ADDRESSES &
0017  SWITCH ACCESS ROUTE #S. ENTER 1 IF LINES ARE ODD &
0018  0 IF EVEN. ENTER 1 FOR LINES PRESENT OR 0 IF NOT.
0019
0020  XM XM RC RC E 501 03 05 07 09 11 13 15 17 19 21 #SW MUX
0021  E2 RT E2 RT 0 502 04 06 08 10 12 14 16 18 20 22 SEC SEC
0022  21 1 22 2 0   1  1  0  0  0  0  0  0  0  0  0   1   1
0023  22 2 21 1 1   1  1  0  0  0  0  0  0  0  0  0   1   1
0024  23 1 24 2 0   0  0  0  0  0  0  1  1  0  0  0   0   0
0025  23 1 25 2 0   0  0  0  0  0  0  1  1  0  0  0   1   1
0026  25 2 23 1 1   0  0  0  0  0  0  1  1  0  0  0   1   1
0027  25 2 24 1 1   0  0  0  0  0  0  1  1  0  0  0   0   0
0028  25 1 26 2 0   0  0  0  0  1  1  0  0  0  0  0   1   1
0029  26 2 25 1 1   0  0  0  0  1  1  0  0  0  0  0   1   1
0030  22 4 23 3 0   1  1  0  0  0  0  0  0  0  0  0   1   1
0031  23 3 22 4 1   1  1  0  0  0  0  0  0  0  0  0   1   1
0032   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0033   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0034   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0035   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0036   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0037   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0038   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0039   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0040   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0041   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0042   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0043   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0044   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0045   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0046   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
0047   0 0  0 0 0   0  0  0  0  0  0  0  0  0  0  0   0   0
```

Fig. 5—Typical GFPASC Data Base File

TABLE C

GFPASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS	SOURCE
0001	Heading (TSC station name and date of last modification to file).	Locally provided
0002 0003	Identifying information for the file—GAIN, FREQUENCY AND PILOT ASCII DATA BASE PR-50023-01-GFPASC ISSUE 2 11/11/77	— —
0004 0005	Header information— FREQUENCY RANGE (KHZ) XMTR SEND FLAT GAIN LOW HIGH STEP TYPE ACC LEVEL DBM ADJUST DB	Preformatted Data Base File
0006	Frequency limits and nominal pilot levels are identified in columns as follows: Column Meaning 1 1000. kHz default value for the lowest frequency that can be transmitted (> 10 kHz) during a gain/frequency test. 2 70,000. kHz default value for the highest frequency that can be transmitted (<100,000 kHz) during a gain/frequency test. 3 1000. kHz step default value of first frequency increment for a gain/frequency test. If this value is altered, the value entered should be such that there are less than 382 frequency measurements. 4 1 is default value for power of values for frequencies on whch equal size frequency increments are based (ie, 1 = linear scale and 0.5 = square root of frequency scale). 5 1 is the number of measurements to be made and averaged at each frequency step. 6 −25.0 dBm is the transmitter output level for the gain/frequency test. 7 −25.0 dB is the expected flat gain from the transmitter to the receiver for the gain/frequency test.	
0008 0009	Header information— TLT LEVELS IN DBM AT: LP1 LP2 LP3 LP4 JG1 JG2 JG3 MMG1 MMG2 MMG3	
0010	Normal pilot levels at TLT point are identified in columns as follows: Column Pilot Level 1 2.976 kHz line pilot −49.5 dBm	

TABLE C (Contd)

GFPASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS	SOURCE

0010 (Contd)	<u>Column</u> <u>Pilot</u> <u>Level</u>
	
	2 20.992 khz line pilot —48.1 dBm
	3 42.880 kHz line pilot —46.54 dBm
	4 66.048 kHz line pilot 1 —51.1 dBm
	5 Jumbogroup pilot 1 (5888.0 kHz —59.0 dBm
	      for 17 mastergroup 1.5 or 8448.0
	      kHz for 18 mastergroup L5)
	6 Jumbogroup pilot 2 (27,392.0 —57.6 dBm
	      kHz)
	7 Jumbogroup pilot 3 (48,896.0 —56.3 dBm
	      kHz)
	8 Multimastergroup pilot 1 (5888.0 —60.5 dBm
	      kHz for 20 mastergroup L5E or
	      13,920.0 kHz for 22 mastergroup
	      L5E)
	9 Multimastergroup pilot 2 —59.1 dBm
	      (30,880.0 kHz)
	10 Multimastergroup pilot 3 —57.8 dBm
	      (54,176.0 kHz)
		Preformatted Data Base File

0012 0013	Header information— TLT DIFF IN DB LINE DEVIATION IN DB/# SW SECTS LN PILOT OTHER 0 1 2 3 4 5 6	
0014	Allowable differences in levels of the line pilots and all other pilots and allowable deviation for the line by switch section are identified in columns as follows: <u>Column</u> <u>Meaning</u> 1 0.5 dB is the allowable difference between measured and nominal values for line pilots at the TLT point. 2 2.0 dB is the allowable difference between measured and nominal values for all pilots other than line pilots at the TLT point.	

TABLE C (Contd)

GFPASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS	SOURCE

0014 (Contd)	Column Meaning
	
	3 thru 9 Allowable deviation of line loss in dB according to number of switching sections from a nominal line as shown below:
	
	Switching Sections Allowable Deviation (dB)
	     0 0.4
	     1 0.6
	     2 0.9
	     3 1.2
	     4 1.6
	     5 2.0
	     6 2.4
		Preformatted Data Base File

0016 0017 0018	Header information— ALLOWABLE COMBINATIONS OF TRANS & REC E2 ADDRESS & SWITCH ACCESS ROUTE #S. ENTER 1 IF LINES ARE ODD & 0 IF EVEN. ENTER 1 FOR LINES PRESENT OR 0 IF NOT.	
0020 0021	Header information— XM XM RC RC E 501 03 05 07 09 11 13 15 17 19 21 #SW MUX E2 RT E2 RT O 502 04 06 08 10 12 14 16 18 20 22 SEC SEC MUX SEC	
0022	Allowable combinations of E2 addresses, SAN numbers, lines equipped, switching, and multiplex information are identified in columns as follows: Column Meaning 1 21 is the E2 address at the transmit end of an L5 line section. 2 1 is the local route number assigned to the TSS hardware to access the TLT point at the transmitting end of an L5 line section. 3 22 is the E2 address at the receiving end of an L5 line section. 4 2 is the local route number assigned to the TSS hardware to access the RLT point at the receiving end of an L5 line section. 5 0 indicates that data in this line pertains to an even-numbered line. 1 indicates line is odd numbered.	Engineering Line Drawings and Local Records

TABLE C (Contd)

GFPASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS		SOURCE
0022 (Contd)	Column	Meaning	Engineering Line Drawings and Local Records
	6 thru 16	1 in columns 6 and 7 indicates that lines 501, 502, 503, and 504 are in service. 0 in columns 8 thru 16 indicates that lines 505 thru 522 are not in service. A 1 in any column indicates a 17 mastergroup L5 System, 2 is for an 18 mastergroup L5 System, 3 is for a 20 mastergroup L5E System, and 4 is for a 22 mastergroup L5E System.	
	17	1 indicates that there is 1 switching section in this line section to a maximum of 6. 0 indicates that there are no switching sections.	
	18	1 indicates that this line section is a multiplex section. 0 indicates that it is not.	
003 thru 0032	These lines contain the same type data as line 0022 for the other allowable combinations of E2 transmitting and receiving sections for this particular TSS (Fig. 3).		Local records
0033 thru 0047	Performatted data base file.		— —

```
0001    HEADING----------------------------------------------------------
0002              MULTIPLEX ASCII DATA BASE       (446 LINES)
0003                          PR-50023-01-MUXASC ISSUE 4  9/12/78
0004    LIMITS:(MMGT)
0005        1        2       3        4        5       6        7
0006     -10.0    -10.0   -50.0    -25.0     0.0    -60.5    -59.1
0007     -57.8    -69.9   -68.8    -67.9    -65.0   -70.9     2.0
0008      2.0      1.0     1.0      1.0     -45.0    1.0       .0
0009       .0       .0      .0       .0       .0      .0       .0
0010
0011    LIMITS:(JMX)
0012        1        2       3        4        5       6        7
0013     -50.0     30.0   -30.1    -33.4     3.0     3.0     -93.0
0014      2.0     -93.0    4.0    -103.0   -93.0  -103.0    -88.0
0015      1.0     -77.0    4.0     -87.0     .0      .0       .0
0016       .0       .0      .0       .0      .0      .0       .0
0017
0018    ----------------------------------------------------------------
0019    MMGT MXCODE E2A RTE FUN OS TRTE RLIN SPEC        DESCRIPTION
0020    ----------------------------------------------------------------
0021     0      0    0   0   0   0   0    0    0    *              *
0022     0      0    0   0   0   0   0    0    0    *              *
0023     0      0    0   0   0   0   0    0    0    *              *
0024     0      0    0   0   0   0   0    0    0    *              *
0025     0      0    0   0   0   0   0    0    0    *              *
0026     0      0    0   0   0   0   0    0    0    *              *
0027     0      0    0   0   0   0   0    0    0    *              *
0028     0      0    0   0   0   0   0    0    0    *              *
0029     0      0    0   0   0   0   0    0    0    *              *
0030     0      0    0   0   0   0   0    0    0    *              *
0031     0      0    0   0   0   0   0    0    0    *              *
0032     0      0    0   0   0   0   0    0    0    *              *
0033     0      0    0   0   0   0   0    0    0    *              *
0034     0      0    0   0   0   0   0    0    0    *              *
0035     0      0    0   0   0   0   0    0    0    *              *
0036     0      0    0   0   0   0   0    0    0    *              *
0037     0      0    0   0   0   0   0    0    0    *              *
0038     0      0    0   0   0   0   0    0    0    *              *
0039     0      0    0   0   0   0   0    0    0    *              *
0040     0      0    0   0   0   0   0    0    0    *              *
0041     0      0    0   0   0   0   0    0    0    *              *
0042     0      0    0   0   0   0   0    0    0    *              *
0043     0      0    0   0   0   0   0    0    0    *              *
0044     0      0    0   0   0   0   0    0    0    *              *
0045     0      0    0   0   0   0   0    0    0    *              *
0046     0      0    0   0   0   0   0    0    0    *              *
0047     0      0    0   0   0   0   0    0    0    *              *
```

Fig. 6—Preformatted MUXASC Data Base File

```
BSPMUX T=00004 IS ON CR00021 USING 00096 BLKS R=0320

0001    HEADING DRANESVILLE,VA.
0002              MULTIPLEX ASCII DATA BASE        (446 LINES)
0003                        PR-50023-01-MUXASC ISSUE 4  9/12/78
0004    LIMITS:(MMGT)
0005       1       2       3       4       5       6       7
0006     -10.0   -10.0   -50.0   -25.0     0.0   -60.5   -59.1
0007     -57.8   -69.9   -68.8   -67.9   -65.0   -70.9     2.0
0008       2.0     1.0     1.0     1.0   -45.0     1.0      .0
0009        .0      .0      .0      .0      .0      .0      .0
0010
0011    LIMITS:(JMX)
0012       1       2       3       4       5       6       7
0013     -50.0    30.0   -30.1   -33.4     3.0     3.0   -93.0
0014       2.0   -93.0     4.0  -103.0   -93.0  -103.0   -88.0
0015       1.0   -77.0     4.0   -87.0      .0      .0      .0
0016        .0      .0      .0      .0      .0      .0      .0
0017
0018    -----------------------------------------------------------------
0019    MMGT MXCODE E2A RTE FUN OS TRTE RLIN SPEC        DESCRIPTION
0020    -----------------------------------------------------------------
0021     0   1125   25   1   3   0   1   509   0  * DSVLVA - MNRVMD JG 1  *
0022     0   1125   26   1   3   0   2   510   0  * MNRVMD - DSVLVA JG 1  *
0023     0   2125   25   2   3   0   1   509   0  * DSVLVA - MNRVMD JG 2  *
0024     0   2125   26   2   3   0   2   510   0  * MNRVMD - DSVLVA JG 2  *
0025     0   3125   25   3   3   0   1   509   0  * DSVLVA - MNRVMD JG 3  *
0026     0   3125   26   3   3   0   2   510   0  * MNRVMD - DSVLVA JG 3  *
0027     0   1121   21   1   3   0   1   503   0  * WAYNPA - PHLAPA JG 1  *
0028     0   1121   22   1   3   0   2   504   0  * PHLAPA - WAYNPA JG 1  *
0029     0   1025   23   4   3   0   1   513   0  * MNRVMD - PTTWPA JG 1  *
0030     0   1025   25   4   3   0   2   514   0  * PTTWPA - MNRVMD JG 1  *
0031     0      0    0   0   0   0   0     0   0  *                       *
0032     0      0    0   0   0   0   0     0   0  *                       *
0033     0      0    0   0   0   0   0     0   0  *                       *
0034     0      0    0   0   0   0   0     0   0  *                       *
0035     0      0    0   0   0   0   0     0   0  *                       *
0036     0      0    0   0   0   0   0     0   0  *                       *
0037     0      0    0   0   0   0   0     0   0  *                       *
0038     0      0    0   0   0   0   0     0   0  *                       *
0039     0      0    0   0   0   0   0     0   0  *                       *
0040     0      0    0   0   0   0   0     0   0  *                       *
0041     0      0    0   0   0   0   0     0   0  *                       *
0042     0      0    0   0   0   0   0     0   0  *                       *
0043     0      0    0   0   0   0   0     0   0  *                       *
0044     0      0    0   0   0   0   0     0   0  *                       *
0045     0      0    0   0   0   0   0     0   0  *                       *
0046     0      0    0   0   0   0   0     0   0  *                       *
0047     0      0    0   0   0   0   0     0   0  *                       *
```

Fig. 7—Typical MUXASC Data Base File

TABLE D

MUXASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS	SOURCE
0001	Heading (TSC station name and date of last modification to file).	Local provided.
0002 0003	Identifying information for the file— MULTIPLX ASCII DATA BASE (446 LINES) PR-50023-01-MUXASC ISSUE 4 9/12/78	
0004 0005	Header information and column identification— LIMITS: (MMGT) 1 2 3 4 5 6 7	
0006	MMGT MG pilot information is identified in columns as follows: Column Meaning 1 −10.0 dB is the figure repesenting maximum allowable loss in each half of the T/R bay calibration path allowed by the MUXPG program. 2 −10.0 dB is the figure representing the maximum loss in each half of the MGT bay calibration path allowed by the MUXPG program. 3 −50.0 dBm is the expected received level when calibrating on the T/R bayside of the MMGT 4 −25.0 dBm is the level of the signals which the MUXPG program causes to be transmitted through the MMGT. 5 0.0 is reserved for future use. 6 −60.5 dBm is the nominal MG pilot level for MMG1T at the TLT point in the T/R bay. 7 −59.1 dBm is the nominal MG pilot level for MMG2T at the TLT point in the T/R bay.	Preformatted Data Base File
0007	MMGT MG pilot information is identified in columns as follows: Column Meaning 1 −57.8 dBm is the nominal MG pilot level for MMG3T at the TLT point in the T/R bay. 2 −69.9 dBm is the nominal MG pilot level for MMG1T at the RT point in the T/R bay.	

TABLE D (Contd)

MUXASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS		SOURCE
0007 (Contd)	Column	Meaning	
	3	—68.8 dBm is the nominal MG pilot level for MMG2T at the RT point in the T/R bay.	
	4	—67.9 dBm is the nominal MG pilot level for MMG3T at the RT point in the T/R bay.	
	5	—65.0 dBm is the nominal MG pilot level at the TST TRMTG point in the MGT bay.	
	6	—70.9 dBm is the nominal MG pilot level at the TST RCVG point in the MGT bay.	
	7	2.0 dB is the MG pilot level deviation at the RT point in the T/R bay allowed by the MUXPG program.	Preformatted Data Base File
0008	MMGT MG pilot information is identified in columns as follows:		
	Column	Meaning	
	1	2.0 dB is the MG pilot level deviation at the TLT point in the T/R bay allowed by the MUXPG program.	
	2	1.0 dB is the MG pilot level deviation at the TST TRMTG point in the MGT bay allowed by the MUXPG program.	
	3	1.0 dB is the MG pilot level deviation at the TST RCVG point in the MGT bay allowed by the MUXPG program.	
	4	1.0 dB is the signal level gain deviation for the MMGT allowed by the MUXPG program.	
	5	—45.0 dBm is the nominal level for MMGT carrier supply signal.	
	6	1.0 dB is the level deviation for MMGT carrier supply signals allowed by the MUXPG program.	
	7	0.0 is reserved for future use.	

TABLE D (Contd)

MUXASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS	SOURCE
0009	All 0.0s are reserved for future use.	
0010 001 002	Header information and column identification— LIMITS: (JMX) 1 2 3 4 5 6 7	
0013	JMX pilot information is identified in columns as follows: Column Meaning 1 −50.0 dBm is the level of the calibration signal expected by the MUXPG program. 2 30.0 dB is the maximum loss in the calibration path allowed by the MUXPG program. 3 −30.1 dBm is the nominal carrier supply signal (CARRIER A/B) level for JG1 and JG2. 4 −33.4 dBm is the nominal carrier supply signal (CARRIER A/B) level for JG3. 5 3.0 dB is the maximum level deviation for JG1 and JG2 carrier supply signals allowed by the MUXPG program. 6 3.0 dB is the maximum level deviation for JG3 carrier supply signal allowed by the MUXPG program. 7 −93.0 dBm is the nominal JG pilot level at XMIT IN.	Preformatted Data Base File
0014	JMX pilot information is identified in columns as follows: Column Meaning 1 2.0 dB is the maximum allowable JG pilot level deviation at XMIT IN. 2 −93.0 dBm is the nominal MG pilot level at XMIT IN. 3 4.0 dB is the maximum allowable MG pilot level deviation at XMIT IN.	

TABLE D (Contd)

MUXASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS	SOURCE
0014 (Contd)	Column Meaning 4 — −103.0 dBm is the threshold level for all pilots at XMIT IN. 5 — −93.0 dBm is the minimum level for all pilots at XMIT OUT A/B. 6 — −103.0 dBm is the minimum level for all pilots at REC IN A/B. 7 — −88.0 dBm is the minimum level for all pilots at REG IN A/B.	
0015	JMX pilot information is identified in columns as follows: Column Meaning 1 — 1.0 dB is the maximum level difference on all comparison measurements (any A to B comparisons) allowed by the MUXPG program. 2 — −77.0 dBm is the nominal level for all pilots REG OUT A/B. 3 — 4.0 dB is the maximum allowable level deviation at REG OUT A/B. 4 — −87.0 dBm is the minimum level for all pilots at REG OUT A/B. 5, 6, and 7 — 0.0s should not be altered.	Preformatted Data Base File
0016	All 0.0s are reserved for future use.	
0018 0019 0020	Header MMGT MXCODE E2A RTE FUN OS TRTE RLIN SPEC DESCRIPTION	

TABLE D (Contd)

MUXASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS	SOURCE
0021	Access information for each multiplex section is defined in columns as follows: Column Meaning 1 0 indicates that it is not an MMGT section. A 1 indicates that it is an MMGT section. 2 1125 is a locally assigned code for a JG section along the L5 route. The first digit always identifies the JG/MMG type (frequency spectrum) and must therefore be a 1, 2, or 3. The remaning three digits can be arbitrarily assigned. A suggested method is to designate the first JG1/MMG1 as 1001 and the second JG1/MMG1 as 1002, etc. The first JG2/MMG2 is designated as 2001 and the second JG2/MMG2 as 2002, etc. Following this pattern, the first JG3/MMG3 is designated as 3001 and the second JG3/MMG3 as 3002, etc. No 4-digit combination can be repeated in the entire MUXASC file. A −1 in this column signifies to DBGEN the end of the file. 3 25 is the E2 address of the station containing the JMX/MMGT terminal. 4 1 is the port number (1-12) of the switch access network route level switch which is used to access the line level switch associated with the JG/MMG. 5 3 is the port number (1-12) of the switch access network function level switch which is used to access the proper route level switch. 6 0 indicates that the JG/MMG is not out-of-service (OS). A 1 indicates that the equipment is OS. 7 1 is the port number of the switch access network route level switch which is used to access the line level switch associated with the receiving line for the JG/MMG section (presently used only for MMGT measurements).	Local records and Engineering Line Drawings Local records

TABLE D (Contd)

MUXASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS		SOURCE
	Column	Meaning	
0021 (Contd)	8	509 is the L5 line number of the receiving line for the JG/MMG section (presently used only for MMGT measurements).	
	9	0 is from preformatted data base. A 1 indicates that the port (port 3 of the 1 × 4 line level switch in the MGT bay) is wired for carrier access; a 0 indicates that it is not.	Local records
	10	The local identification for the multiplex section is *DSVLVA — MNRVMD JG1*. Twenty-two spaces are provided between the asterisks for this purpose.	
0022 thru 0030	Access information for the remaining multiplex sections in the L5 line (Fig. 3).		
0031 thru 0047	Preformatted data base file		

STATIONS		MMGT	MXCODE	A							B						
A	B			E2A	RTE	FUN	OS	TRTE	RLIN	SPEC	E2A	RTE	FUN	OS	TRTE	RLIN	SPEC

Fig. 8—MUXASC Data Base File Work Sheet

STATIONS		MMGT	MXCODE	A							B						
A	B			E24	RTE	FUN	OS	TRTE	RLIN	SPEC	E24	RTE	FUN	OS	TRTE	RLIN	SPEC
DSVLVA	MNRVMD		1125	25	1	3	0	1	509		26	1	3	0	2	510	
			2125		2	3	0	1	509			2	3	0	2	510	
			3125		3	3	0	1	509			3	3	0	2	510	
WAYNPA	PHLAPA		1121	21	1	3	0	1	503		22	1	3	0	2	504	
MNRVMD	PTTWPA		1225	25	4	3	0	2	514		23	4	3	0	1	513	

Fig. 9—MUXASC Data Base File Work Sheet Example

```
0001    HEADING: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
0002              L4 PILOT ASCII DATA BASE
0003                    PR-50023-01-L4PASC ISSUE 2      7/17/78
0004    TLT DIFF. IN DB      LINE DEVIATION IN DB          CABLE
0005    LN PILOT  OTHER   1    2    3    4    5    6      LEN
0006      .5       2.0   0.8  1.2  1.6  2.0  2.6  3.2    0.00
0007
0008    ALLOWABLE COMBINATIONS OF TRANS & REC E2 ADDRESSES &
0009    SWITCH ACCESS ROUTE #S. ENTER 1 IF LINES ARE ODD &
0010    0 IF EVEN. ENTER 1 FOR LINES PRESENT OR 0 IF NOT.
0011
0012    XM XM RC RC E 401 03 05 07 09 11 13 15 17 19 #SW RCV
0013    E2 RT E2 RT 0 402 04 06 08 10 12 14 16 18 20 SEC HYB
0014     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0015     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0016     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0017     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0018     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0019     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0020     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0021     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0022     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0023     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0024     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0025     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0026     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0027     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0028     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0029     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0030     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0031     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0032     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0033     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0034     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0035     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0036     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0037     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0038     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0039     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0040     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0041     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0042     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0043     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0044     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0045     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0046     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
0047     0  0  0  0 0   0  0  0  0  0  0  0  0  0  0  0   0
```

Fig. 10—Preformatted L4 PASC Data Base File

```
L4PASC T=00003 IS ON CR00002 USING 00005 BLKS R=0054

0001 HEADING:  DRANESVILLE,VA.
0002           L4 PILOT ASCII DATA BASE
0003             PR-50023-01-L4PASC ISSUE 2  7/17/78
0004 TLT DIFF.  IN DB       LINE DEVIATION IN DB      CABLE
0005 LN PILOT   OTHER     1     2     3     4     5     6     LEN
0006   .5        2.0     0.8   1.2   1.6   2.0   2.6   3.2    9.00
0007
0008 ALLOWABLE COMBINATIONS OF TRANS & REC E2 ADDRESSES &
0009 SWITCH ACCESS ROUTE #S. ENTER 1 IF LINES ARE ODD &
0010 O IF EVEN. ENTER 1 FOR LINES PRESENT OR 0 IF NOT.
0011
```

Line	XM E2	XM RT	RC E2	RC RT	E 0	401 402	03 04	05 06	07 08	09 10	11 12	13 14	15 16	17 18	19 20	#SW SEC	RCV HYB
0012	XM	XM	RC	RC	E	401	03	05	07	09	11	13	15	17	19	#SW	RCV
0013	E2	RT	E2	RT	0	402	04	06	08	10	12	14	16	18	20	SEC	HYB
0014	12	2	14	1	1	1	1	1	1	1	0	0	0	0	0	1	0
0015	12	1	11	2	0	1	1	1	1	1	0	0	0	0	0	1	0
0016	14	2	16	1	1	1	1	1	1	1	0	0	0	0	0	1	0
0017	16	1	14	2	0	1	1	1	1	1	0	0	0	0	0	1	0
0018	16	1	11	2	0	1	1	1	1	1	0	0	0	0	0	3	0
0019	11	2	12	1	1	1	1	1	1	1	0	0	0	0	0	1	0
0020	11	2	16	1	1	1	1	1	1	1	0	0	0	0	0	3	0
0021	14	1	12	2	0	1	1	1	1	1	0	0	0	0	0	1	0
0022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0028	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0043	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Fig. 11—Typical L4PASC Data Base File
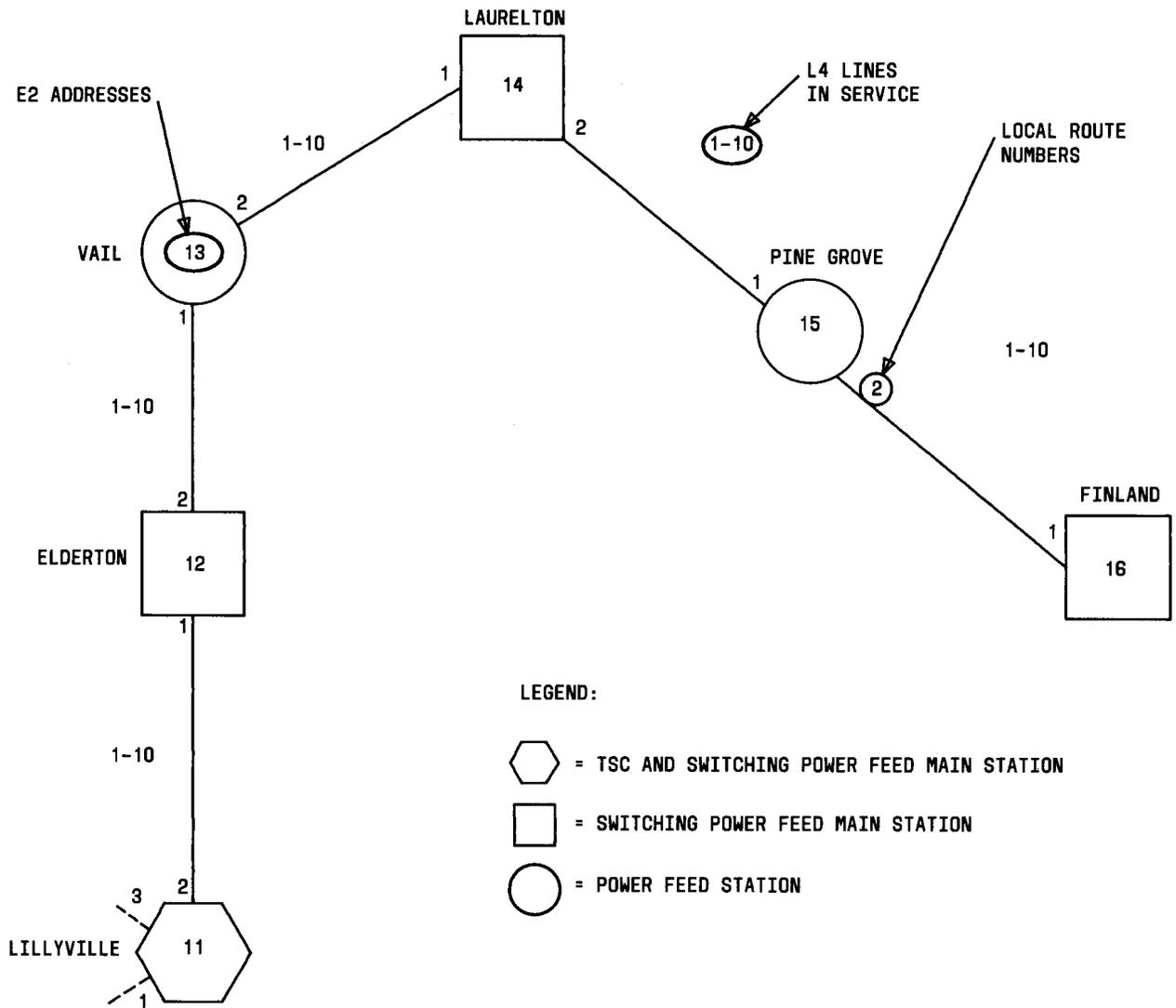
Fig. 12—Typical L5/L5E Line With L4 Lines in Service From Which L4PASC Data Base File in Fig. 11 is Developed

TABLE E

L4PASC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS	SOURCE
0001	Heading (TSC station name and date of last modification to file).	Locally provided
0002 0003	Identifying information for the file—L4 PILOT ASCII DATA BASE PR-50023-01-L4PASC ISSUE 2 7/17/78	Preformatted Data Base File
0004 0005	Header information— TLT DIFF I DB LINE DEVIATION IN DB CABLE LN PILOT OTHER 1 2 3 4 5 6 LEN	

0006	Allowable differences in levels of the line pilots and all other pilots and allowable deviation for the line by switch section are identified in columns as follows:
	
	  Column Meaning
	
	     1 0.5 dB is the allowable difference between measured and nominal values for line pilots at the TLT point.
	
	     2 2.0 dB is the allowable difference between measured and nominal values for all pilots other than line pilots at the TLT point.
	
	  3 thru 8 Allowable deviation of line loss in dB according to number of switching sections from a nominal line as shown below:
	
	      Switching Section Allowable Deviation (dB)
	           1 0.8
	           2 1.2
	           3 1.6
	           4 2.0
	           5 2.6
	           6 3.2
	
	     9 9 feet is the cable length between the L5 SAN and the L4 access point.
		Columns 1-8 Pre-formatted Data Base File
		
		Column 9—Local Records

0008 0009 0010	Header information— ALLOWABLE COMBINATIONS OF TRANS & REC E2 ADDRESS & SWITCH ACCESS ROUTE #S. ENTER 1 IF LINES ARE ODD & 0 IF EVEN. ENTER 1 FOR LINES PRESENT OR 0 IF NOT.	Preformatted Data Base File
0012 0013	Header information— XM XM RC RC E 401 03 05 07 09 11 13 15 17 19 #SW RCV E2 RT E2 RT O 402 04 06 08 10 12 14 16 18 20 SEC HYB	

TABLE E (Contd)

L4PSC DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENTS	SOURCE
0014	Allowable combinations of E2 addresses, SAN numbers, lines equipped, number of switching sections, and hybrid information are identified in columns as follows:	Local Records
0014 Contd	Column Meaning 1 12 is the E2 address at the transmit end of an L4 line section. 2 2 is the local route number assigned to the TSS hardware to access the TLT point at the transmitting end of an L4 line section. 3 14 is the E2 address of the receiving end of an L4 line section. 4 1 is the local route number assigned to the TSS hardware to access the RLT point at the receiving end of an L4 line section. 5 1 indicates that data in this line pertains to an odd-numbered line. 0 indicates line is even numbered. 6 thru 15 1 in columns 6, 7, 8, 9, and 10 indicates that lines 401 thru 410 are in service. 0 indicates that lines 411 thru 420 are not in service. 16 1 indicates that there is 1 switching section in this line section (maximum of 6) 17 1 indicates that a TSS-CTMS hybrid is present; 0 indicates that it is not present. If present, the hybrid loss is subtracted from the calibration loss since there is no CMTS hybrid in the L4 measurement paths.	Local records
0015 thru 0021	These lines contain similar data as line 0014 for the other allowable combinations of L4 E2 transmitting and receiving sections for this particular TSS (Fig. 11).	Local records
0022 thru 0047	Preformatted data base file.	— —

```
0001  **  HEADING: ----------------------------------------------
0002  **
0003  **              TIMTBL ASCII DATA BASE
0004  **              PR-50023-01-TIMTBL ISSUE 1 11/11/77
0005  **
0006  **  COMMENTS IN THE TIMTBL FILE MUST CONTAIN
0007  **  THE ASCII CHARACTERS ** IN COLUMNS 1 AND 2.
0008  **  THE FOLLOWING ARE TWO EXAMPLES:
0009  **
0010  **  SCHEDULE FAULT TO RUN EVERY MONDAY AT 12:00.
0011  **  THE OUTPUT FROM FAULT WILL GO THE THE LINE PRINTER.
0012  **
0013  **  FAULT,MONDAY,12,00,6
0014  **  THIS IS AN EXAMPLE
0015  **  REG,3,10
0016  **  2660
0017  **  501,509
0018  **  ALL
0019  **  /E
0020  **
0021  **  A /E MUST SEPARATE DIFFERENT PROGRAMS
0022  **
0023  **  SCHEDULE PILOT ON THE 15TH OF EVERY MONTH AT 1:30.
0024  **  THE OUTPUT WILL GO TO THE SYSTEM CONSOLE.
0025  **
0026  **  PILOT,15,1,30,1
0027  **  THIS IS AN EXAMPLE
0028  **  YES,NO
0029  **  SG
0030  **  ONE
0031  **  12,14
0032  **  501,509
0033  **  /E
0034  **
0035  **  A /E AT THE END OF EVERY SECTION
```

Fig. 13—Preformatted TIMTBL Data Base File

```
0001  **  HEADING: -----------------------------------------
0002  **
0003  **              TIMTBL ASCII DATA BASE
0004  **              PR-50023-01-TIMTBL ISSUE 1 11/11/77
0005  **
0006  **  COMMENTS IN THE TIMTBL FILE MUST CONTAIN
0007  **  THE ASCII CHARACTERS ** IN COLUMNS 1 AND 2.
0008  **  THE FOLLOWING ARE TWO EXAMPLES:
0009  **
0010  **  SCHEDULE FAULT TO RUN EVERY MONDAY AT 12:00.
0011  **  THE OUTPUT FROM FAULT WILL GO THE THE LINE PRINTER.
0012  **
0013  **  FAULT,MONDAY,12,00,6
0014  **  THIS IS AN EXAMPLE
0015  **  REG,3,10
0016  **  2660
0017  **  501,509
0018  **  ALL
0019  **  /E
0020  **
0021  **  A /E MUST SEPARATE DIFFERENT PROGRAMS
0022  **
0023  **  SCHEDULE PILOT ON THE 15TH OF EVERY MONTH AT 1:30.
0024  **  THE OUTPUT WILL GO TO THE SYSTEM CONSOLE.
0025  **
0026  **  PILOT,15,1,30,1
0027  **  THIS IS AN EXAMPLE
0028  **  YES,NO
0029  **  SG
0030  **  ONE
0031  **  12,14
0032  **  501,509
0033  **  /E
0034  **
0035  **  A /E AT THE END OF EVERY SECTION
0036  FAULT,16,10,30,6
0037  AIRMONT 11/77
0038  AL,NO,1
0039  33
0040  AL
0041  AL
0042  /E
0043  /E
0044  PILOT,EV,11,00,1
0045  AIRMONT 11/77
0046  YE,YE
0047  JG
0048  SW
0049  /E
0050  /E
0051  TDIAG,EV,11,30,1
0052  AL,YE
0053  /E
0054  /E
0055  ETEST,FR,11,30,1
0056  AL,YE
0057  RE
0058  NO
0059  13,AN,,3
0060  /E
0061  /E
```

Fig. 14—Typical TIMTBL Data Base File

TABLE F

PROMPTERS FOR APPLICATION PROGRAMS SCHEDULED BY TIMTBL

APPLICATION PROGRAMS	PROMPTERS
FAULT	DESCRIPTION — ? PRINT (ALL, REG+ALARMS),PLOT (NO OR 1-4), # TO AVERAGE? LINE CODE (ALL OR SPECIFY #) ? LINE #(S): FIRST (OR ALL,ODD,EVEN), LAST ? MANHOLE #(S): FIRST (OR ALL), LAST ?
PILOT	DESCRIPTION — ? PRINT ALL, MEASURE AT RLT? PILOTS (LINE,JG,MMG, MG OR SG)? SECTIONS (MUX, SWITCH OR ONE)? E2 ADDRESS: TLT, RLT? LINE #(S): FIRST (OR ALL), LAST-?
L4PIL	DESCRIPTION — ? PRINT ALL, MEAS. AT TLT ONLY (YES OR NO)? PILOTS: LINE OR +MG OR +SG-? SECTIONS: SWITCHING OR SINGLE-? E2 ADDRESS: TLT, RLT-? LINES: FIRST, LAST-?
MUXPG	DESCRIPTION — ? MXCODE, E2A, OPTION?

TABLE G

TIMTBL DATA BASE FILE CONTENT DESCRIPTION

LINE NO.	CONTENT
0001 thru 0035	Application program scheduling examples (preformatted data base file).
0036 thru 0042	FAULT is scheduled to run on the 16th of each month at 10:30 a.m. (10,30). The output is to be printed on the line printer (6). The schedule was established at Airmont in November 1977. All repeater measurement results will be printed but not plotted, and only one measurement will be made of each FLO tone. One line code (33) will be checked. All lines and the repeater in all manholes of the lines of line code 33 will be measured. The /E of line 0042 terminates the program.
0043	This /E separates individual program schedules.
0044 thru 0049	PILOT is scheduled to run everyday at 11:00 a.m., and the output will be printed on the system console (1). This program schedule was also made at Airmont in November 1977. All measurements are to be printed and will be made at the RLT test joint in addition to TLT. Line and JG pilots of all switching sections in the GFPASC data base file will be measured. The /E of line 0049 terminates the program.
0050	This /E separates individual program schedules.
0051 thru 0053	TDIAG is scheduled to run everyday at 11:30 a.m., and the output will be printed on the system console (1). The check will be made of all stations, and the program will continue even if an error is encountered. The /E of line 0053 terminates the program.
0054	This /E separates individual program schedules.
0055 thru 0060	ETEST is scheduled to run every Friday at 11:30 a.m., and the output will be printed on the system console. Note that TDIAG, since it runs everyday, is also scheduled to start at 11:30 a.m. TDIAG will start at 11:30 and run to completion, then ETEST will begin execution. The program will run in the quick-reply mode and will expect to test a specific E2 address. The program will perform a remote (RE) test and no instructions will be printed. E2 equipment at E2 address 13 will be tested in the answer (AN) mode, and three tests in succession will be performed. Note that parameter 3 has been defaulted to zero by the use of two commas since no actual word need be specified for this test. The /E of line 0060 terminates the program.
0061	This /E separates individual program schedules.
As reqd	